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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/652,140	08/29/2003	Gary L. Graunke	ITL.0896US (P14859)	1168

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EXAMINER
PERUNGAVOOR, VENKATANARAY

ART UNIT	PAPER NUMBER
2132	

MAIL DATE	DELIVERY MODE
07/31/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/652,140	GRAUNKE, GARY L.
	Examiner	**Art Unit**	
	Venkat Perungavoor	2132	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 May 2007*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6, 9, 10, 12, 16-22 and 24-26* is/are rejected.

7)☒ Claim(s) *7, 8, 11, 13-15, 23 and 27* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *29 August 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

U.S. Patent and Trademark Office

PTOL-326 (Rev. 08-06)   Office Action Summary   Part of Paper No./Mail Date 200707231

DETAILED ACTION

Response to Arguments

Applicant's arguments, see pages 8-10, filed 5/22/2007, with respect to the rejection(s) of claim(s) 1-27 under 35 USC § 102(e) under US Patent 2004/0115860 A1 to Johnson have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of US Patent 5280613 to Chan et al.(hereinafter Chan).

The amendments to the title obviates the objection to the specification.

The amendments to the claim 3 obviates the 35 USC § 112 2¶ rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 9-10, 20, 24 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent 5280613 to Chan et al.(hereinafter Chan).

Regarding Claim 9, Chan discloses the analyzing flow of data in source code having one or more program operators matching references to a pair of variables see Col 13 Ln 53-60; determining block

of source code in which a pair of variables not used see Col 30 Ln 35-68; associating the matching

references based on heuristic to provide encryption to modify the portion of source code into

encrypting complier-generated code see Col 3 Ln 20-30 & Fig. 13 item 1312 & 1306;mixing the

encrypting complier-generated code with source code see Fig. 13 item 1372 & 1302.

Regarding Claim 10, Chan discloses the regions for encryption and using variables/offsets for

distinguishing offsets see Col 59 Ln 13-26.

Regarding Claim 20, Chan discloses the analyzer to perform the flow analysis to obtain program

operators see Col 13 Ln 53-60; transforming the selected region to provide encrypting complier-

generated code see Col 3 Ln 11-30.

Regarding Claim 24, Chan discloses the memory having code stored onto it see Fig. 11 item 202; the

analyzer to perform the flow analysis to obtain program operators see Col 13 Ln 53-60;

transforming the selected region to provide encrypting complier-generated code see Col 3 Ln 11-30.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections

set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section
> 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the
> subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary
> skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the
> invention was made.

Claims 1-5,16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6931634

to Croix in view of US Patent 5339419 to Chan et al.(hereinafter Chan).

Regarding Claim 1, Croix discloses the applying of transformation to portion of source to provide a

encrypting complier generated code see Col 3 Ln 62-Col 4 Ln 4 & Fig.1-2. But Croix does not

disclose the obtaining of operators from the code and transforming the code based on the operators.

However, Chan discloses the obtaining of operators from the code and transforming based on the

operators in pre-complier of complier module see Col 11 Ln 37-46 & Col 12 Ln 67- Col 13 Ln 20 &

Fig. 12 item 1114. Chan's invention involves converting an source code into an intermediate code,

ANDF, based source code that the complier processes, HPcode-Plus, thereby generating an

assembly code that is independent of machines. It would be obvious to one having ordinary skill in

the art at the time of the invention to include the obtaining of operators from the code and

transforming based on the operators in the invention of Croix in order to have an standardized

encryption process that is secure and unique to the code as taught in Chan see Col 47 Ln 8-15 & Col

13 Ln 5-31.

Regarding Claim 16, Croix discloses the applying of transformation to portion of source to provide a

encrypting complier generated code see Col 3 Ln 62-Col 4 Ln 4 & Fig.1-2. But Croix does not

disclose the obtaining of operators from the code and transforming the code based on the operators.

However, Chan discloses the obtaining of operators from the code and transforming based on the

operators see Col 11 Ln 37-46 & Col 12 Ln 67- Col 13 Ln 20. Chan's invention involves converting

an source code into an intermediate code, ANDF, based source code that the complier processes,

HPcode-Plus, thereby generating an assembly code that is independent of machines. It would be

obvious to one having ordinary skill in the art at the time of the invention to include the obtaining

of operators from the code and transforming based on the operators in the invention of Croix in

order to have an standardized encryption process that is secure and unique to the code as taught in

Chan see Col 47 Ln 8-15 & Col 13 Ln 5-31.

Regarding Claim 2, 17, Croix discloses an sub-file from a file which is encrypted with the file

generate an encrypted compiler generated code see Abstract & Col 2 Ln 23-51.

Regarding Claim 3-5, 18-19, Croix does not explicitly disclose the deriving from source code a

complier-generated operator for data transformation. But Chan discloses the deriving from source

code a complier-generated operator to be used for encryption see Col 4 Ln 27-37 & Col 3 Ln 10-20.

And further, the intermediate instructions convert directly to theIt would be obvious to one having

ordinary skill in the art at the time of the invention to include the deriving from source code a

complier-generated operator to be used for encryption in the invention of Croix in order to increase

low-level security as taught in Chan see Col 4 Ln 38-45.

Claims 6, 12, 21-22, 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent

5280613 to Chan et al.(hereinafter Chan) in view of US Patent 4642764 to Auslander et

al.(hereinafter Auslander).

Regarding Claim 6, 12, Chan discloses the encrypting of code and mixing of encrypted code and

source code see Fig. 13 item 1372 & 1302. But does not disclose the reference points and associating

points for encryption/decryption. However, Auslander discloses the reference points and·

associating points for encryption/decryption see Fig. 3 item 4 & Fig. 4 item 4. It would be obvious

to one having ordinary skill in the art at the time of the invention to include the reference points and

associating points for encryption/decryption in the invention of Chan in order to make use hash

functions as taught in Auslander see Col 6 Ln 59-67.

Regarding 21-22, 25-26, Chan does not disclose the cipher based on the operators. However,

Auslander discloses the cipher based on operators see Fig. 4 item 7 & 8.

Allowable Subject Matter

Claims 7-8, 11, 13-15, 23, 27 are objected to as being dependent upon a rejected base claim, but

would be allowable if rewritten in independent form including all of the limitations of the base claim

and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be

directed to Venkat Perungavoor whose telephone number is 571-272-7213. The examiner can

normally be reached on 8:30-5:00. If attempts to reach the examiner by telephone are unsuccessful,

the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application

Information Retrieval (PAIR) system. Status information for published applications may be

obtained from either Private PAIR or Public PAIR. Status information for unpublished applications

is available through Private PAIR only. For more information about the PAIR system, see

http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system,

contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like

assistance from a USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.
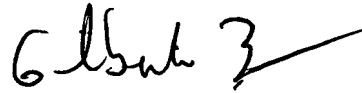
/VP/
Venkat Perungavoor
Examiner
Art Unit 2132
July 25, 2007

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